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EXAMINER

CHORBAJI, MONZER R

ART UNIT PAPER NUMBER

1744

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,298

Applicant(s)

KREICHAUF, RUTH D.

Examiner

MONZER R. CHORBAJI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 32-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 32-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This final office action is in response to the amendment received on 02/03/2005

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1 and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In amended claim 1, lines 4-5, applicant recites the phrase "said at least one room includes less than all of the rooms in the building". The examiner does not understand the meaning of this added feature. Rewriting of this limitation is required.

In amended claim 45, lines, applicant recites the phrase "at least one room that occupies less than all of the building interior". How much less of the interior of the building does this room occupies? The examiner does not understand the meaning of this added feature. Rewriting of this limitation is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-2, 5, 32, 36, 42 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long (Bioterrorism Secrets For Survival) in view of Hoag (No Such Thing As Doomsday).

With respect to claims 1, 32, 36, 44 and 45, the Long reference teaches creating a sealed room within a building or a house (page 48, subheading "Creating a sealed room or safe room") in case of a biological attack by sealing the windows and doors (page 47, lines 20-22). The Long reference teaches that creating a sealed room within a building is more effective in protecting occupants than trying to seal the entire structure by sealing its vents (page 49, lines 8-11). The room has walls defined by the building. The Long reference further discloses covering the walls, ceiling and floor inside the room with a plastic material (page 48, subheading "Creating a sealed room or safe room"). The room in the building or house is connected to the HVAC air supply and returns ducts (page 44, lines 13-14) and is dimensionally occupying less than the rest of the rooms in the building. By placing the plastic sheets (sealing means) on the walls, the ceiling and the floor, an air tight shelter is created such that the vents are intrinsically sealed thereby sealing off the room from air in the building outside of this room and from

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the building air return and supply ducts. In addition, the Long reference teaches the concept of sealing the air vents in a house (page 49, lines 8-11). This concept also includes sealing vents throughout the house including individual rooms within the house or an apartment thereby results in a room having its vents sealed from the rest of the house. However, with respect to claims 1, 32, 36, 44 and 45, the Long reference fails to teach the following: an oxygen source is coupled to the room for adding gaseous oxygen to the room atmosphere, a carbon dioxide scrubber is coupled to the room for removing the gaseous carbon dioxide from the room atmosphere, an air revitalizing device. The Hoag reference, which is in the art of keeping people alive within a shelter in case of a biological attack, teaches the use of oxygen generator/carbon dioxide scrubbing device coupled to the shelter (page 3, under the subtitle "Air Supply" and page 6, under the subtitle "sealed shelter atmosphere") such that oxygen is added to the atmosphere of the sealed shelter and carbon dioxide is removed from the atmosphere of the sealed shelter (i.e., an air revitalizing device). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sealed room of the Long reference by including an air revitalizing device for supplying oxygen and removing carbon dioxide from the room atmosphere as taught by the Hoag reference since adequate amounts of air are required, not only for supplying the occupants with their chemical requirements, but also for environmental requirements (page 3, under the subtitle "Air Supply").

With respect to claims 2, 5, 42 and 46-47, the Long reference fails to teach the following: oxygen source is a gaseous oxygen generator, oxygen source includes a

chemical oxygen source and the air revitalization device includes a carbon dioxide filter. However, the Hoag discloses the use of a device to generate gaseous oxygen (page 6, under the subtitle "sealed shelter atmosphere"), a chemical oxygen source (page 5, under the subtitle "air intake and exhaust ducts, lines 19-20) and the use of carbon filters (page 6, under the subtitle "Air Scrubbers" and page 7). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sealed room of the Long reference by including an air revitalizing device for supplying oxygen and removing carbon dioxide from the room atmosphere as taught by the Hoag reference since adequate amounts of air are required, not only for supplying the occupants with their chemical requirements, but also for environmental requirements (page 3, under the subtitle "Air Supply").

6. Claims 3 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long (Bioterrorism Secrets For Survival) in view of Hoag (No Such Thing As Doomsday) as applied to claims 2 and 32 and further in view of Mayland et al (U.S.P.N. 3,485,743).

With respect to claims 3 and 33, both the Long reference and the Hoag reference fail to disclose an oxygen generator that includes an exhaust tube, which has a terminal free end outside of the room; however, the Mayland reference, which is in the art of designing devices for removing hydrogen peroxide in shelters (col.2, lines 9-13 and lines 33-40), teaches that the electrolytic oxygen generating/carbon dioxide absorbing device vents oxygen (figure 2, compartment 10 through tubing) to the outside of the shelter (col.3, lines 4-5). Thus, it would have been obvious to one having ordinary skill in

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the art at the time the invention was made to modify the sealed room of the Long reference by including an electrolytic oxygen generating/carbon dioxide absorbing device with an oxygen exhaust tubing venting to the outside of the shelter since the Mayland reference discloses either to vent or collect oxygen and leaves choosing either option as an obvious matter of choice of design to one of ordinary skill in the art to determine.

7. Claims 4 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long (Bioterrorism Secrets For Survival) in view of Hoag (No Such Thing As Doomsday) and Mayland et al (U.S.P.N. 3,485,743) as applied to claims 3 and 33 and further in view of Daroga (U.S.P.N. 4,631,872) and Mulcahy (U.S.P.N. 4,901,872).

With respect to claims 4 and 34-35, the Long reference, the Hoag reference and the Mayland reference all fail to explicitly disclose a plumbing fixture in a sealed enclosure; however, the Mayland reference teach that the electrolytic oxygen generating/carbon dioxide absorbing device uses water and that oxygen is vented to the outside environment of the shelter. The Daroga reference discloses a plumbing fixture (figure 4, 65) within a shelter. The Daroga reference fails to teach using a plumbing fixture as an exhausting means to the outside environment, but the Mulcahy discloses a toilet for establishing gaseous communication between an enclosure and the outside environment by placing a tube through the toilet's watertrap (figure 3, 18). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sealed room of the Long reference by including a plumbing fixture and exhausting the generated oxygen to the outside environment since the Mayland

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reference discloses either to vent or collect oxygen and leaves choosing either option as an obvious matter of choice of design to one of ordinary skill in the art to determine.

8. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long (Bioterrorism Secrets For Survival) in view of Hoag (No Such Thing As Doomsday) as applied to claims 1 and 5 and further in view of the applicant's admitted state of the prior art.

With respect to claims 6-8, both the Long reference and the Hoag reference do not disclose that the chemical source includes a chemical compound, which generates oxygen in the presence of water and also do not disclose a chemical air revitalization compound such as potassium superperoxide. However, the applicant discloses on page 8, lines 6-16, that water based chemical generators for generating oxygen are well known to those skilled in the art. Further, the applicant discloses on page 10, lines 18-22, that it is well known to use air revitalization compound such as potassium superperoxide in order to remove carbon dioxide and generate oxygen. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of the Long reference by including an oxygen source such as a chemical oxygen source or an air revitalization compound, which are admitted by the applicant as being well known to those skilled in the art.

9. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long (Bioterrorism Secrets For Survival) in view of Hoag (No Such Thing As Doomsday) as applied to claim 36 and further in view of the applicant's admitted state of the prior art.

With respect to claims 37-38, both the Long reference and the Hoag reference do not teach an air-revitalizing device such as potassium superoxide. The applicant discloses on page 10, lines 18-22, that it is well known to use air revitalization compound such as potassium superoxide in order to remove carbon dioxide and generate oxygen. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of the Long reference by including potassium superperoxide that chemically removes carbon dioxide and generates oxygen, which are admitted by the applicant as being well known to those skilled in the art.

10. Claims 2-4, 33-35 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long (Bioterrorism Secrets For Survival in view of Hoag (No Such Thing As Doomsday) as applied to claims 1, 32 and 36 and further in view of the applicant's admitted state of the prior art.

With respect to claims 2-4, 33-35 and 39-43, both the Long reference and the Hoag reference do not disclose an air-revitalizing device, which includes an oxygen generator that electrolyzes water, an exhaust tube for discharging waste gas from the oxygen generator, a plumbing fixture having a water trap, a carbon dioxide filter, or a carbon dioxide converter. The applicant has disclosed, on pages 7-11, that the limitations of claims 2-4, 33-35 and 39-43 are well in the art. They are functionally equivalent alternatives, which are known to generate oxygen and remove carbon dioxide from an atmosphere. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of the Long

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reference by including means of generating oxygen and removing carbon dioxide such as those disclosed by the applicant as being well known in the art.

Response to Arguments

11. Applicant's arguments filed 02/03/2005 have been fully considered but they are not persuasive.

The Long reference is applied to show that sealing the vents connected to the heating/air conditioning system of a building in a room within that building is known. The Long reference also teaches that filtered air from the outside can be brought into the sealed room through a vacuum hose.

The Mayland reference is applied to show that extending an oxygen exhaust tube to the outside environment of a shelter is known.

The Daroga reference is applied to show that shelters do include toilets and sinks such that, for example, toilets have water traps.

The Mulcahy reference is applied to show that placing a tube within a toilet in order to establish gaseous communication between the internal environment of an enclosure and the outside is also known.

On page 12 of the Remarks section, applicant argues that, "Mulcahy does not, however, appear to teach a device configured to exhaust air from a room, as asserted by the examiner." The Mulcahy reference discloses a tube inserted through the water trap of the toilet in order to establish communication between the inside environment of the room and the outside. The Daroga reference discloses a toilet in a shelter and the Mayland reference teaches that oxygen from the electrolytic oxygen generating/carbon

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dioxide absorbing device vents oxygen to the outside of the shelter through a tube.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sealed room of the Long reference by including a plumbing fixture in order to establish communication with the outside environment as taught by the Mulcahy reference and exhausting the generated oxygen to the outside environment since the Mayland reference discloses either to vent or collect oxygen and leaves choosing either option as an obvious matter of choice of design to one of ordinary skill in the art to determine.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN KIM can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monzer R. Chorbaji *MRC*
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04/16/2005

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